

Appl. No. 09/511,265
Amdt. Dated August 3, 2004
Reply to Office action mailed May 3, 2004

Replacement Drawings:

While the drawings have not been amended, the attached thirty-four (34) sheets of drawings are provided as replacement sheets. No new matter has been added to the originally filed drawings.

Attachment: Appendix: Thirty (30) Replacement Sheets

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APPENDIX
REPLACEMENT SHEETS

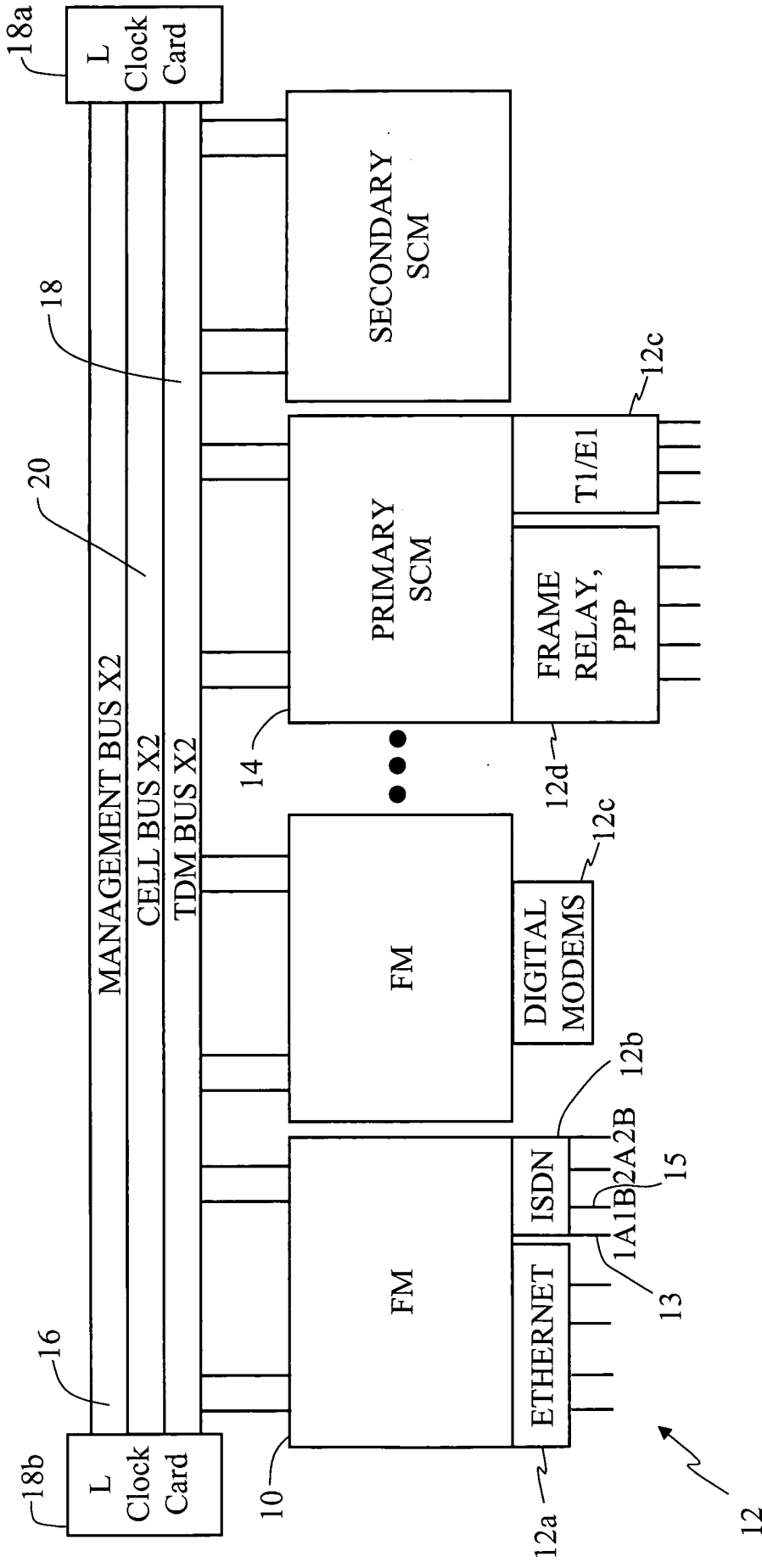


FIG.1

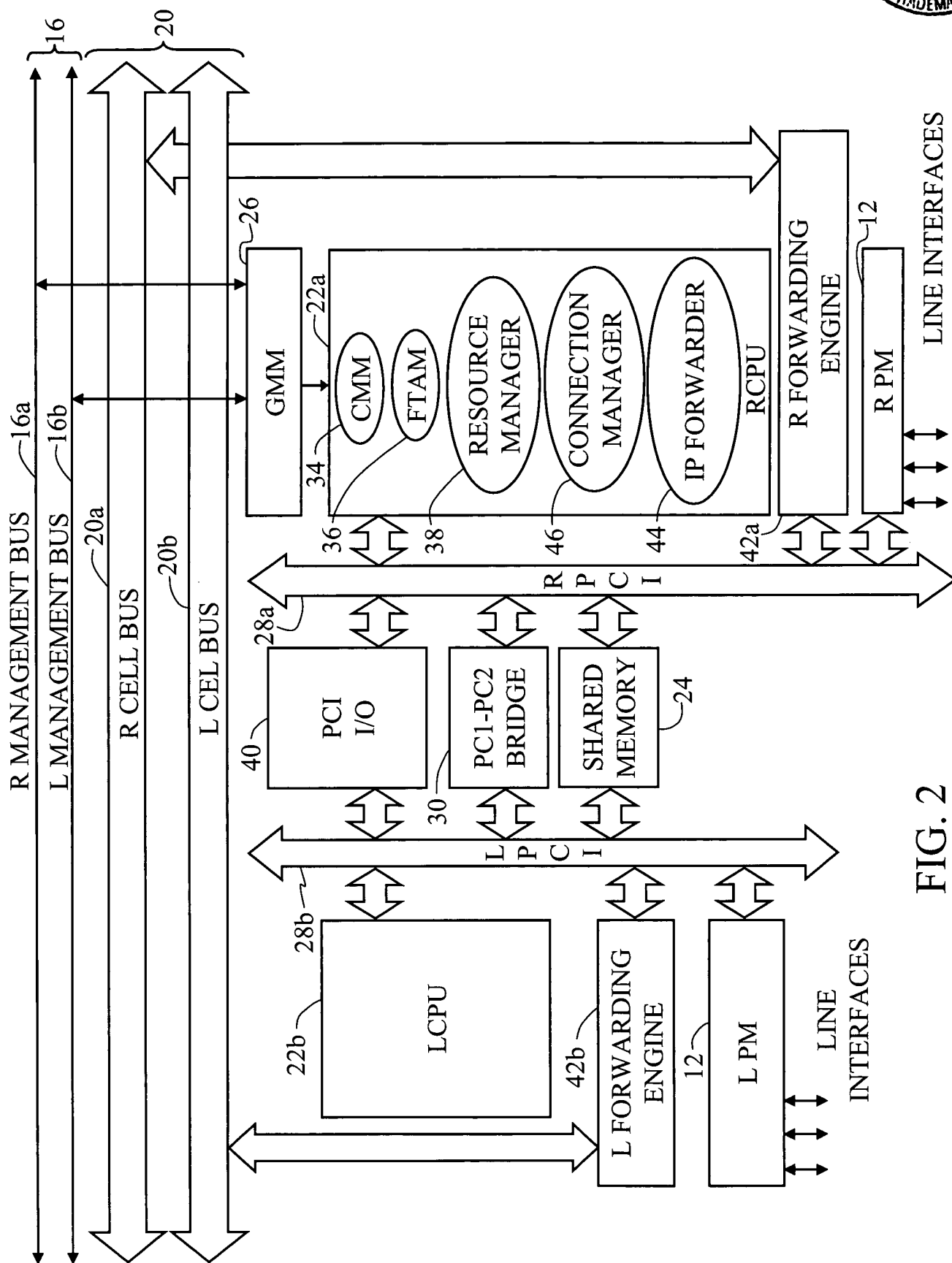


FIG. 2

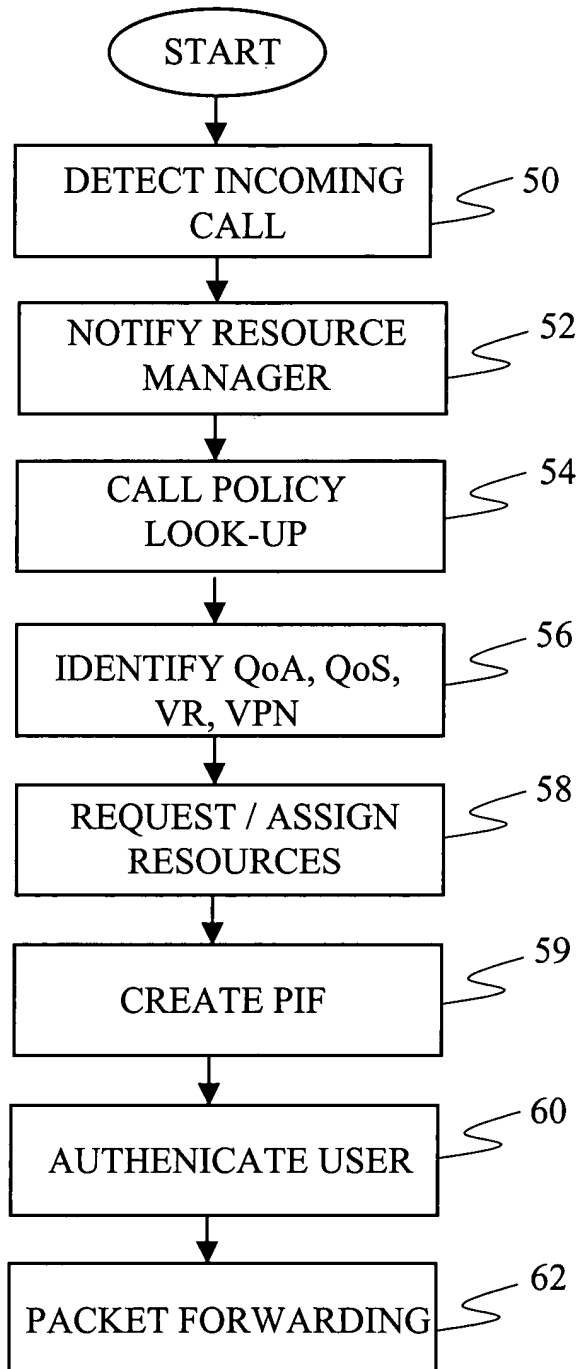


FIG. 3

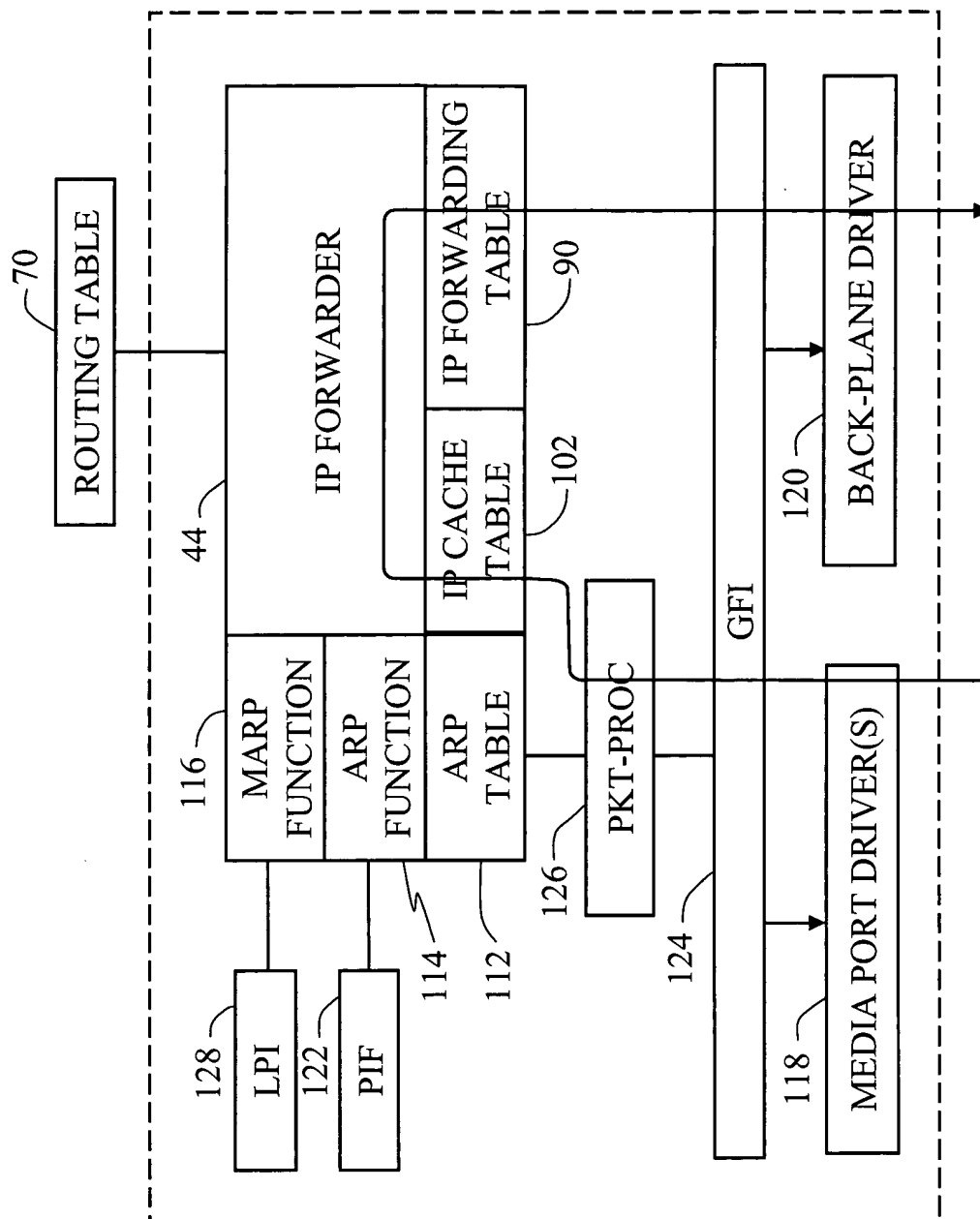


FIG. 4



IP ROUTE TABLE:
TOTAL ROUTES: 32

| DESTINATION | SUBNET MASK | NEXTHOP | OWNER | COST |
|-----------------|-----------------|----------------|-----------|-------|
| 0.0.0.0 | 0.0.0.0 | 206.169.142.9 | STATIC | 1 |
| 0.0.0.0 | 0.0.0.0 | 206.169.114.17 | STATIC | 2 |
| 0.0.0.0 | 0.0.0.0 | 10.1.205.18 | OPSPFE | 11 |
| 10.180.180.0 | 225.225.225.248 | 10.1.205.18 | OPSPFE | 11 |
| 10.3.1.16 | 225.225.225.240 | 10.1.130.2 | OPSPFE | 20 :2 |
| 10.2.215.64 | 225.225.225.240 | 10.1.130.1 | OPSPF1 | 20 |
| 10.3.215.64 | 225.225.225.240 | 10.1.130.2 | OPSPF1 | 20 |
| 10.2.215.0 | 225.225.225.192 | 10.1.130.1 | OPSPF2 | 30 |
| 10.3.215.0 | 225.225.225.192 | 10.1.130.2 | OPSPF2 | 30 |
| 10.2.215.0 | 225.225.225.192 | 10.1.130.1 | OPSPF2 | 30 |
| 10.2.215.0 | 225.225.225.192 | 10.1.130.1 | OPSPF2 | 30 |
| 10.2.215.128 | 225.225.225.192 | 10.1.130.2 | OPSPF2 | 130 |
| 10.1.54.0 | 225.225.225.0 | DIRECT | DIAL-POOL | 1 |
| 10.131.71.0 | 225.225.225.0 | 10.1.205.18 | OPSPFE | 11 |
| 10.1.0.0 | 225.225.0.0 | DIRECT | LOCAL | 1 |
| 10.181.0.0 | 225.225.0.0 | 10.1.205.18 | OPSPFE | 11 |
| 10.87.0.0 | 225.225.0.0 | 10.1.205.18 | OPSPFE | 11 |
| 10.89.0.0 | 225.225.0.0 | 10.1.205.18 | OPSPFE | 11 |
| 10.91.0.0 | 225.225.0.0 | 10.1.205.18 | OPSPFE | 12 |
| 10.200.0.0 | 225.225.0.0 | 10.1.205.18 | OPSPFE | 20 |
| 10.77.0.0 | 225.225.0.0 | 10.1.51.200 | OPSPF1 | 110 |
| 11.22.33.0 | 225.225.225.0 | 10.1.16.16 | OPSPF1 | 110 |
| 206.169.114.16 | 225.225.225.252 | DIRECT | LOCAL | 1 |
| 206.169.114.152 | 225.225.225.248 | DIRECT | DIAL-POOL | 1 |
| 206.169.114.136 | 225.225.225.248 | DIRECT | DIAL-POOL | 1 |

PRESS ENTER TO CONTINUE,
ANY OTHER KEY FOLLOWED BY ENTER TO ABORT:

FIG. 5



PRI-SCM: 1.1>=2:netman:ip#_view ipf

IP Forwarding Table:

Total IPF table entries: 12

| Destination | Subnet Mask | Nexthop | Type | Flags (*) |
|-------------|-----------------|---------------|-------|-----------|
| 10.3.238.1 | 225.255.255.255 | | SPORT | SD(r) |
| 10.1.6.36 | 225.255.255.255 | | SPORT | M |
| 10.1.6.35 | 225.255.255.255 | | SPORT | M |
| 10.1.6.34 | 225.255.255.255 | | SPORT | M |
| 10.1.6.33 | 225.255.255.255 | | SPORT | M |
| 10.1.6.32 | 225.255.255.255 | | SPORT | M |
| 10.1.6.31 | 225.255.255.255 | | SPORT | M |
| 10.2.238.1 | 225.255.255.255 | | SPORT | SD (1) |
| 10.1.6.30 | 225.255.255.255 | | SPORT | SD (1) |
| 10.3.0.0 | 225.255.0.0 | | SPORT | PD (r) |
| 10.2.0.0 | 225.255.0.0 | | SPORT | PD (l) |
| 10.1.0.0 | 225.255.0.0 | | SPORT | PD (l) |
| 0.0.0.0 | 0.0.0.0 | 206.169.142.9 | SPORT | R |

(*) D: Direct (and l=local card only, r=remote card only), S: System i/f, R: Remote, P: Supernet, F:Default, and M: Mgmt.

Actual IPF Table Entries: 12

FIG. 6



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TOTAL IP CACHE ENTRIES: 3

| 104 DESTINATION | 106 SOURCE | 108 OUT PORT | 110 HEADER |
|--------------------|-----------------|-----------------|------------------|
| 207.200.77.45 | 206.169.114.138 | FR.1.5.2.3.1 | 08001000CEA97211 |
| 206.169.114 | 142.10.1.1.25 | MO.1.3.1.1.29 | 0800201DCEA9728E |
| 198.41.0.5 | 206.169.114.138 | FR.1.5.2.3.1 | 08000000CEA97211 |

FIG. 7



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IP ARP TABLE:

| ²⁰⁰ ⚡ IP ADDRESS | ²⁰² ⚡ MAC ADDRESS | ²⁰⁴ ⚡ PHYSICAL PORT | ²⁰⁶ ⚡ TYPE |
|-----------------------------------|------------------------------------|--------------------------------------|-----------------------------|
| 10.1.1.101 | 00-FF-4A-3D-2F-1A | EN.1.3.1.1.1. | S |
| 10.1.5.100 | 00-FF-FF-01-FF-20 | EN.1.3.2.1.1. | D |
| 150.140.140.30 | 08-00-09-FF-65-FF | EN.1.3.1.1.14 | LB |
| 147.128.128.60 | 08-00-09-FF-38-38 | EN.1.3.1.1.10 | D |
| 10.1.5.109 | 00-FF-FF-04-02-FF | EN.1.3.2.1.8 | S |

(*) R:RMT, L: LCL, D: DYN, S: STAT, P: PT2PT, T: ROUTE AND B: BEAST

TOTAL ARP TABLE ENTRIES: 5

FIG. 8

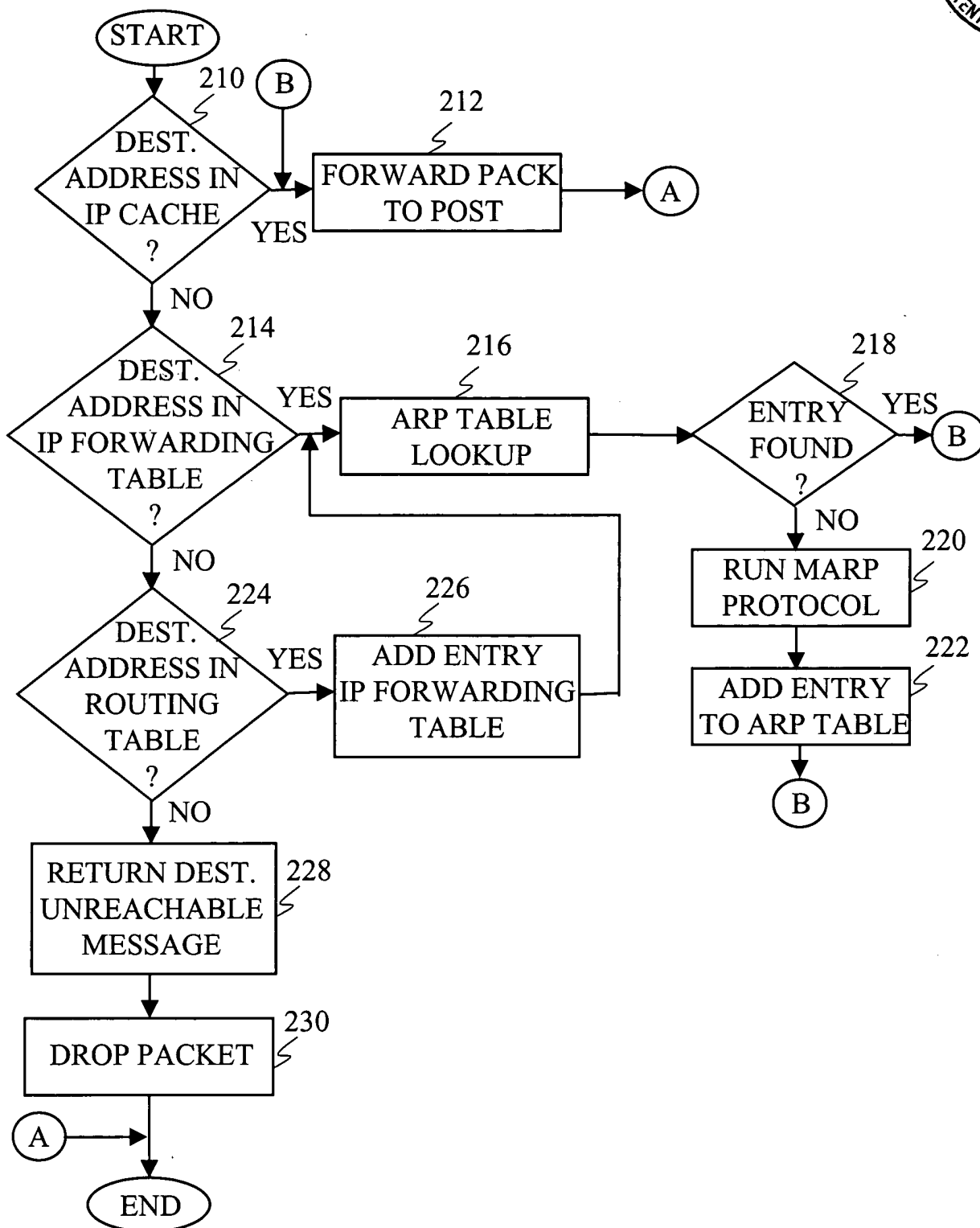


FIG. 9



The diagram shows a table structure with a header row and a data row. The table is enclosed in a larger frame. Label 380 points to the top-right corner of the frame. Label 382 points to the left side of the header row. Label 384 points to the top side of the data row. The table has two columns: "DOMAIN NAME" and "NEXT HOP ROUTER". The data row contains "ISP1", "ISP2", and "ISPN" in the first column, and "206.169.142.9", "206.169.114.17", and "206.169.153.3" in the second column. Ellipses are used to indicate continuation of rows and columns.

| DOMAIN NAME | NEXT HOP ROUTER |
|-------------|-----------------|
| ISP1 | 206.169.142.9 |
| ISP2 | 206.169.114.17 |
| ... | ... |
| ISPN | 206.169.153.3 |

FIG. 10



| | | |
|-----|---------------------|----------------|
| 291 | SEARCH KEY | CALLED-NUM. |
| 292 | SOURCE LINK | N/A |
| 293 | SOURCE CHANNEL | N/A |
| 294 | CALL TYPE: | MODEM |
| 296 | SERVICE TYPE: | PPP |
| 298 | QUALITY OF ACCESS: | 1 |
| 300 | QUALITY OF SERVICE: | 1 |
| 302 | VR ID: | 1 |
| 304 | VPN ID: | 111 |
| 306 | AUTH. SOURCE: | RADIUS |
| 308 | PRY DNS ADDR: | 206.169.25.3 |
| 310 | SCRY DNS ADDR: | 206.169.25.100 |
| 312 | PRY RADIUS SRVR: | 10.1.125.26 |
| 314 | SCRY RADIUS SRVR: | 10.1.6.15 |
| 316 | PHONE NUMBER | 555-5555 |
| 311 | DOMAIN ID | 001 |

FIG. 11

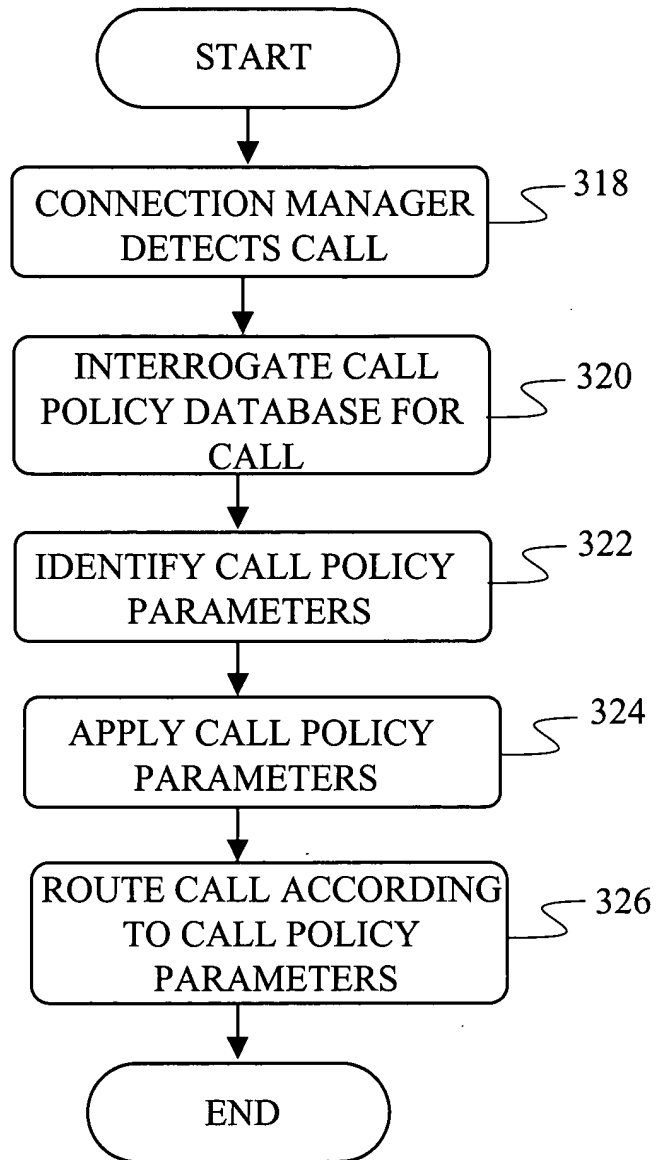


FIG. 12



| QoA LEVEL | ACCESS THRESHOLD |
|-----------|------------------|
| 1 | 100% |
| 2 | 75% |
| 3 | 50% |
| 4 | 25% |

FIG. 13

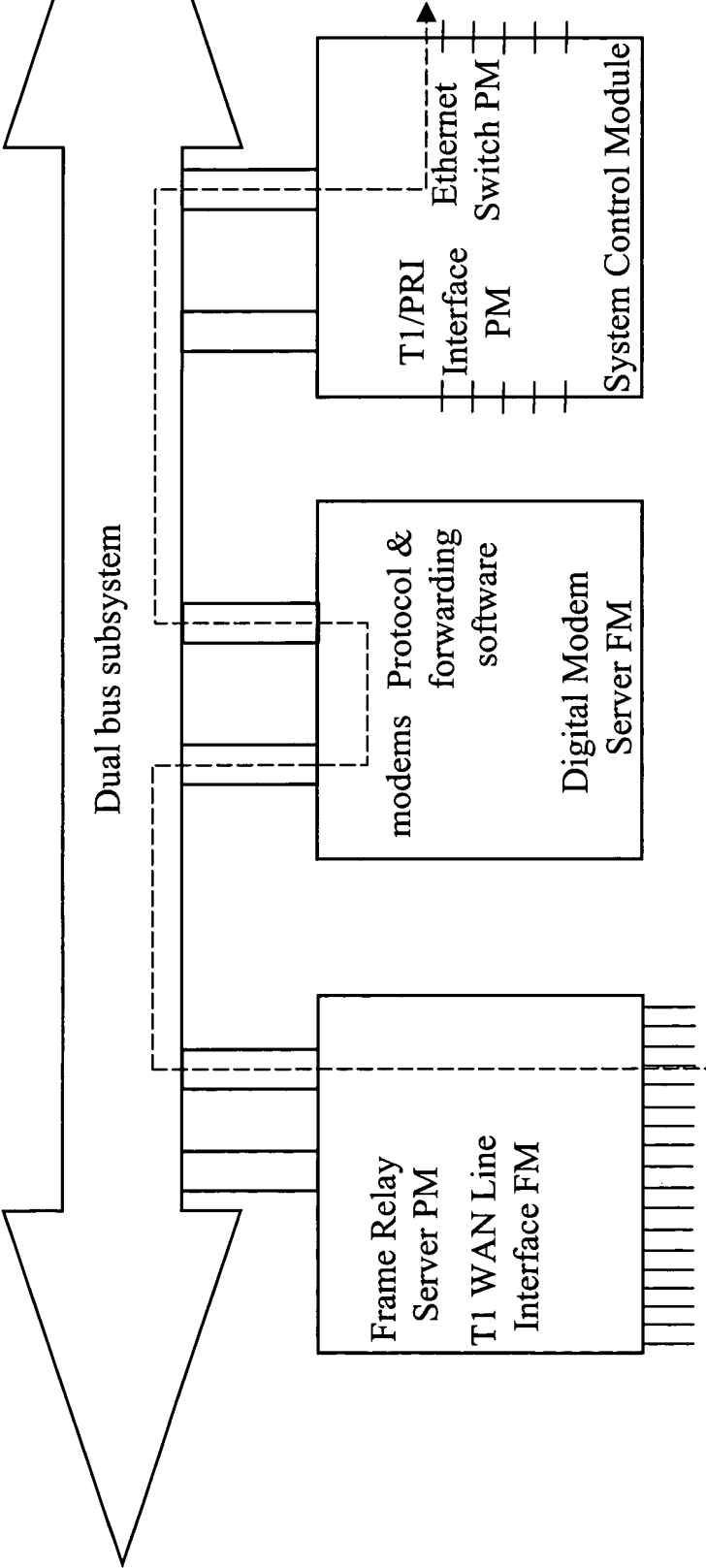


FIG. 14



334

| MODEM RESOURCES | | | | | |
|-----------------|--------------------------|------------|--------------|---------------|--|
| ----- | | | | | |
| 336 | VR ID | = 111 | | | |
| 338 | MAX LOCAL RESOURCES | = 32 | | | |
| 340 | MAX GLOBAL RESOURCES | = 32 | | | |
| 342 | CURRENT LOCAL RESOURCES | = 29 | | | |
| 344 | CURRENT GLOBAL RESOURCES | = 29 | | | |
| 346 | 348 | 350 | 352 | 354 | |
| QOA | LOCAL QOA | GLOBAL QOA | ACCEPT LOCAL | ACCEPT GLOBAL | |
| 1 | 0 | 0 | YES | YES | |
| 2 | 8 | 8 | YES | YES | |
| 3 | 16 | 16 | YES | YES | |
| 4 | 24 | 24 | YES | YES | |

FIG. 15

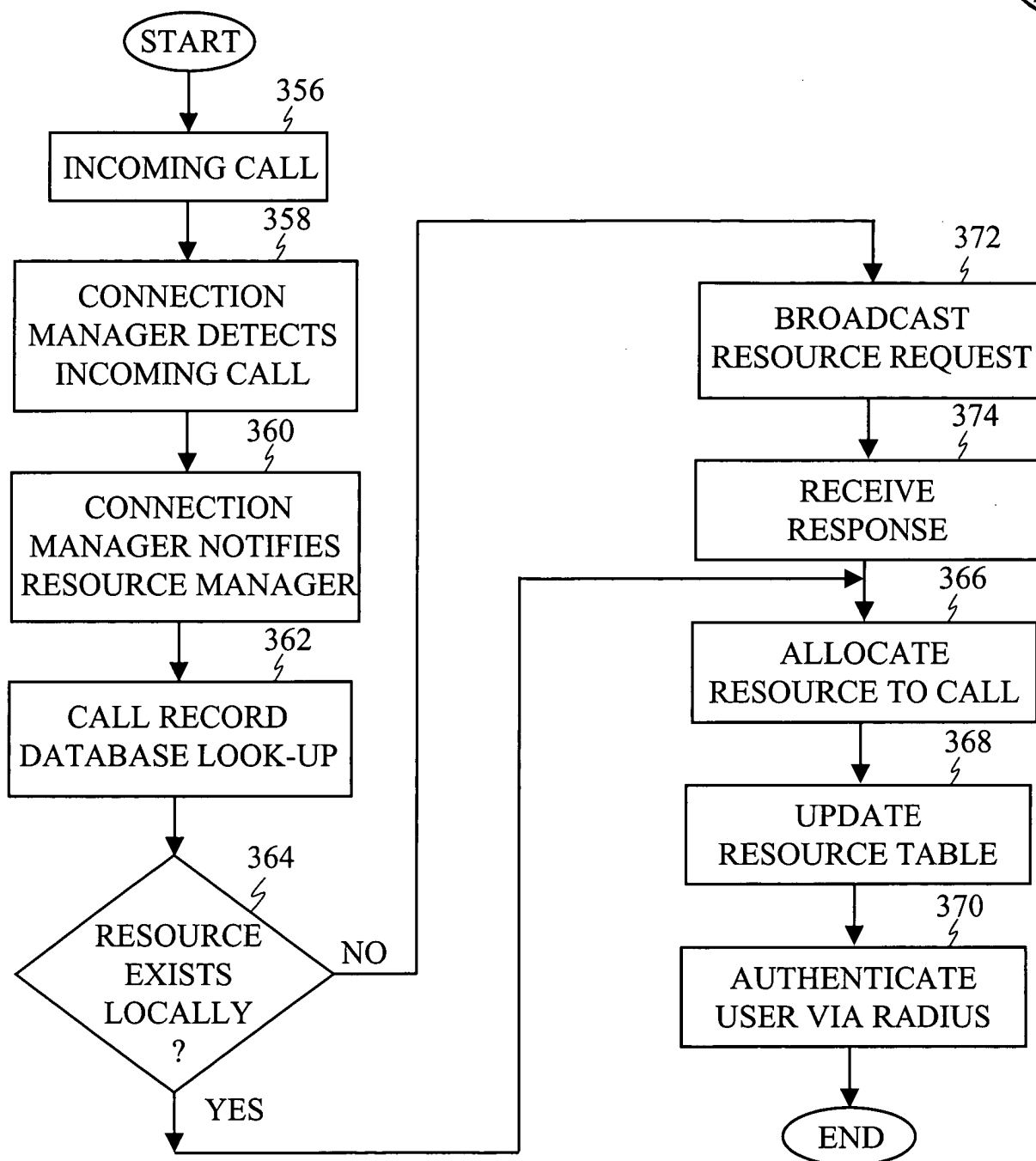
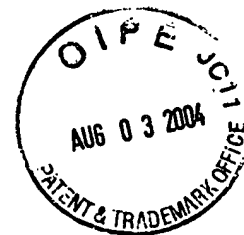


FIG. 16

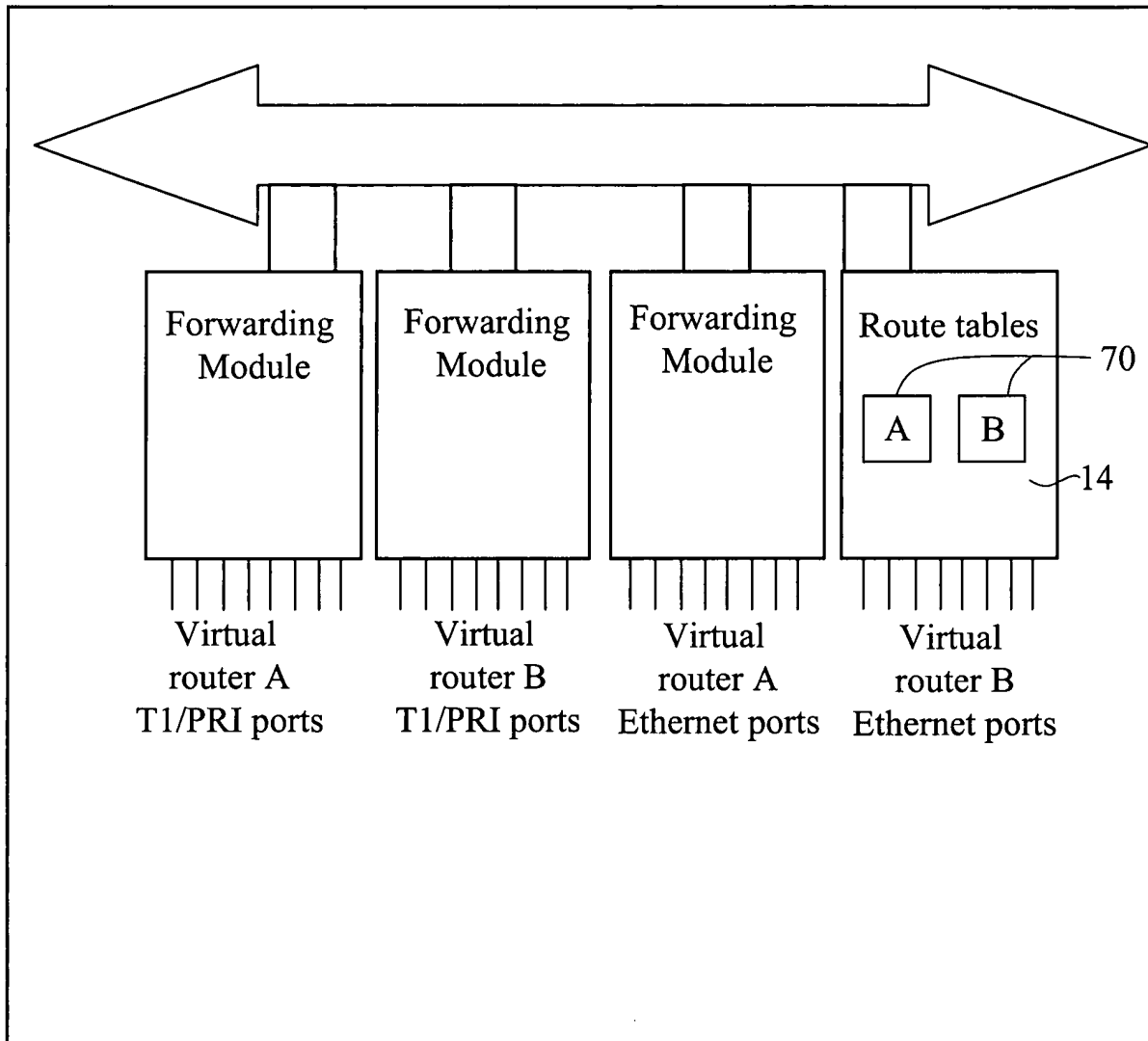


FIG. 17



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IP VPN SESSIONS:

| ²⁴² ⚡ ID | ²⁴⁴ ⚡ VPN – ID | ²⁴⁶ ⚡ SOURCE-ADDR | ²⁴⁸ ⚡ SOURCE-MASK | ²⁵⁰ ⚡ DEST-ADDR | ²⁵² ⚡ DEST-MASK |
|---------------------------|---------------------------------|------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| 1 | 111 | ANY | ANY | 10.1.0.0 | 255.255.0.0 |
| 2 | ANY | 10.1.0.0 | 255.255.0.0 | 208.227.214.0 | 255.255.255.0 |
| 3 | ANY | 10.1.0.0 | 255.255.0.0 | 10.1.0.0 | 255.255.0.0 |
| 4 | ANY | 10.1.0.0 | 255.255.0.0 | 206.169.114.128 | 255.255.255.192 |
| 5 | ANY | ANY | ANY | 10.1.0.0 | 255.255.0.0 |
| 6 | ANY | 10.1.0.0 | 255.255.0.0 | ANY | ANY |
| 7 | ANY | ANY | ANY | ANY | ANY |

FIG. 18



254
⚡

| | | | | | | |
|-------------------------------|----------|----------|----------|-----------|----------|----------|
| PRI – SCM: 1.2>=14:NETMAN:IP# | | | | | | |
| IP VPN RULES: | | | | | | |
| 256 ⚡ | 258 ⚡ | 260 ⚡ | 262 ⚡ | 264 ⚡ | 266 ⚡ | 268 ⚡ |
| ID | PRI | ACTION | IP-PROTO | APP-PROTO | SESSCNT | PKTCOUNT |
| --- | --- | ----- | ----- | ----- | ----- | ----- |
| 1 | 1 | FWD | TCP | FTP | 5 | 3939981 |
| 2 | 1 | DROP | ALL | - | 2 | 3 |
| PRI – SCM: 1.2>=14:NETMAN:IP# | | | | | | |

FIG. 19



270

PRI – SCM: 1.1>=3:NETMAN:IP# VIEW PPN – FILTER
IP VPN LIST OF RULES ATTACHED TO SESSIONS:

272

| SESSID | RULE LIST (IN ORDER OF PRIORITY) |
|--------|----------------------------------|
| 1 | 1 |
| 2 | 1 |
| 3 | 1 |
| 4 | 1 |
| 5 | 2 |
| 6 | 2 |
| 7 | 1 |

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PRI – SCM: 1.1>=4:NETMAN:IP#

FIG. 20

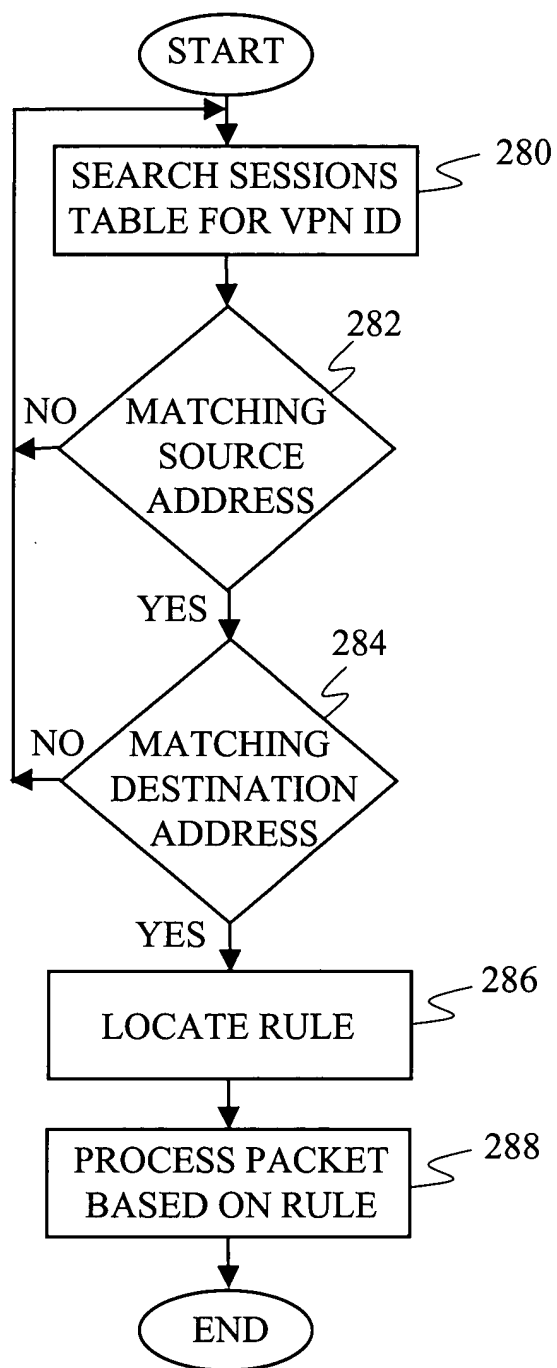


FIG. 21

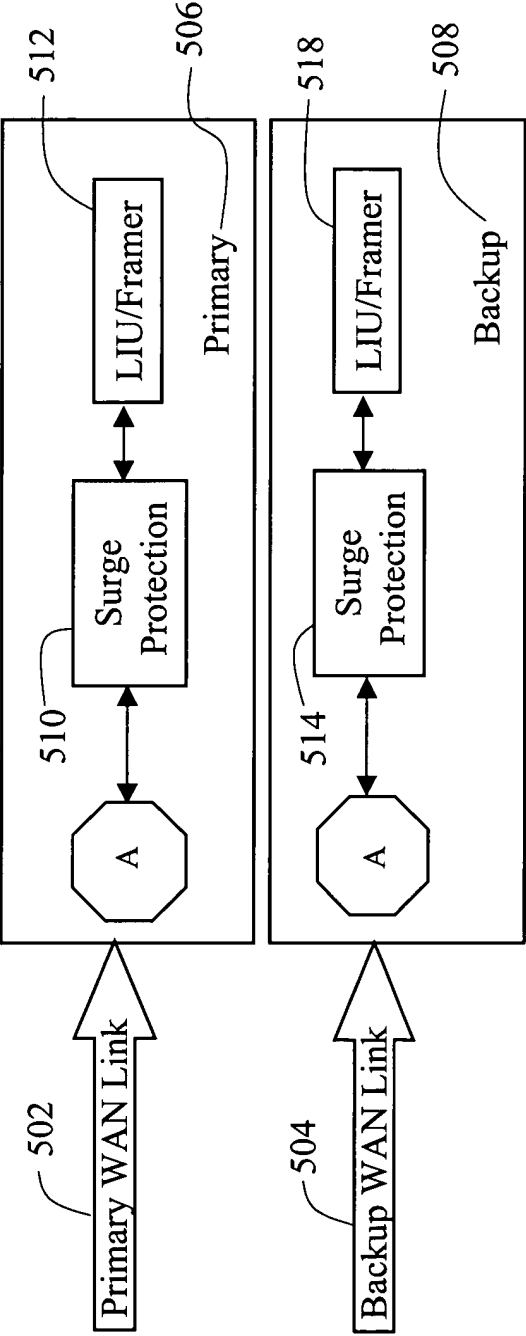


FIG. 22

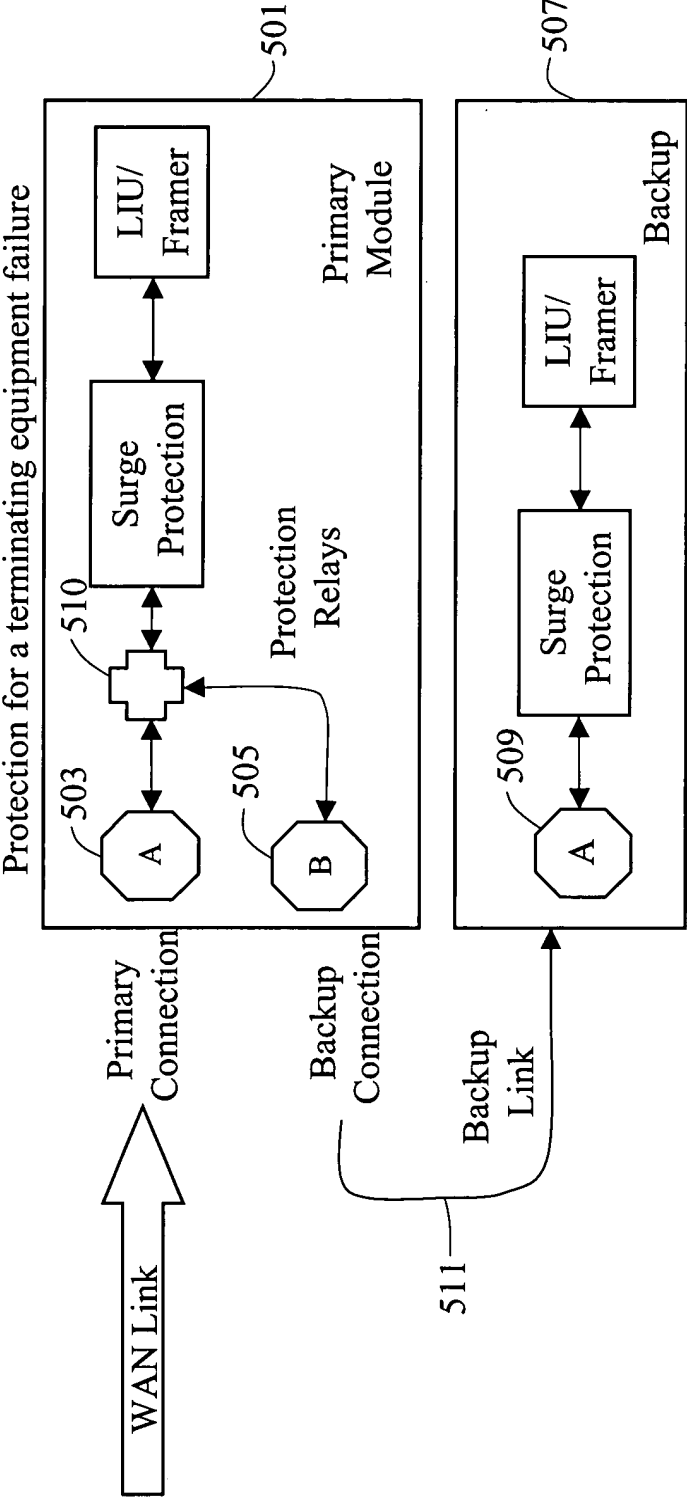


FIG. 23

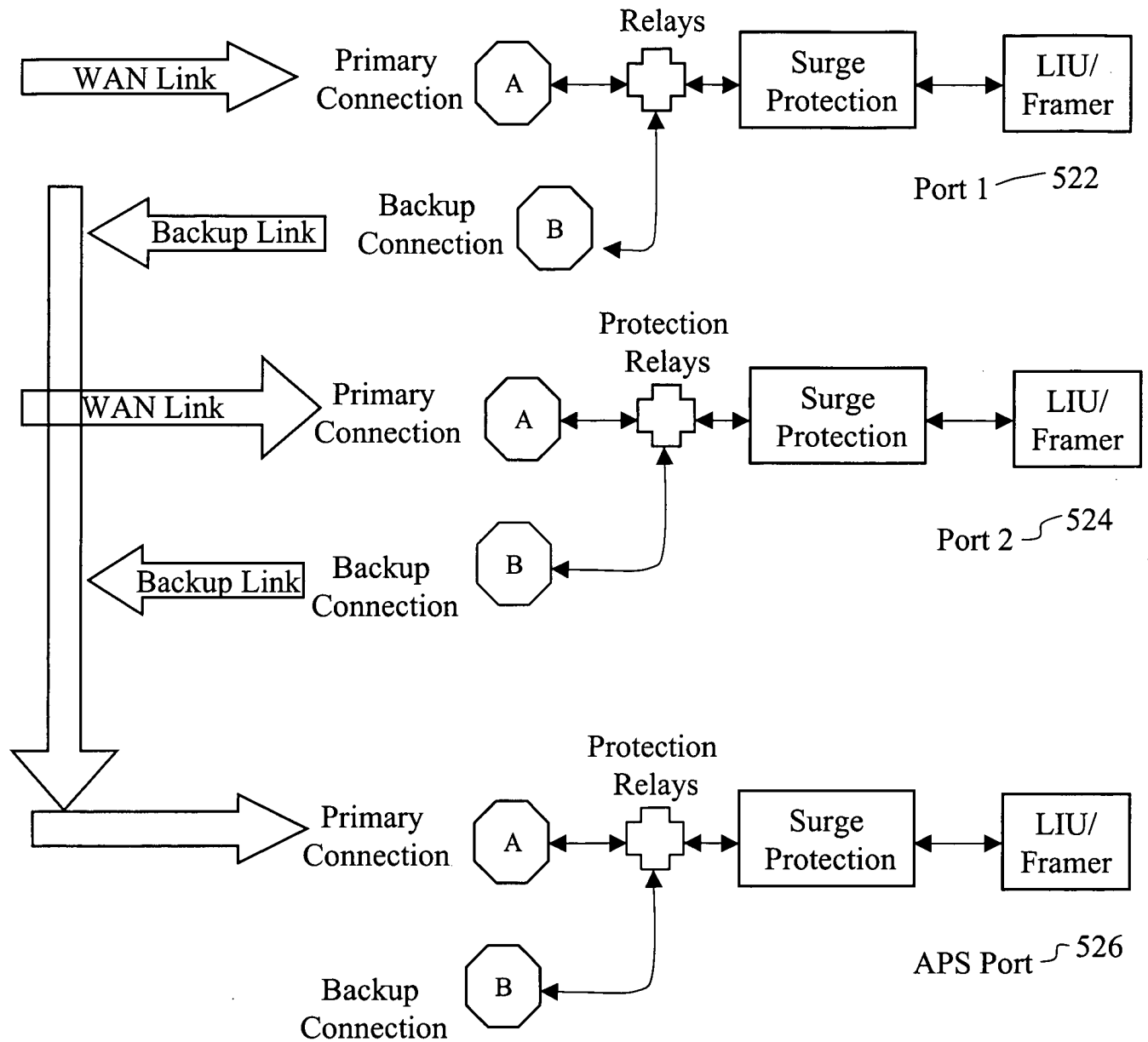


FIG. 24

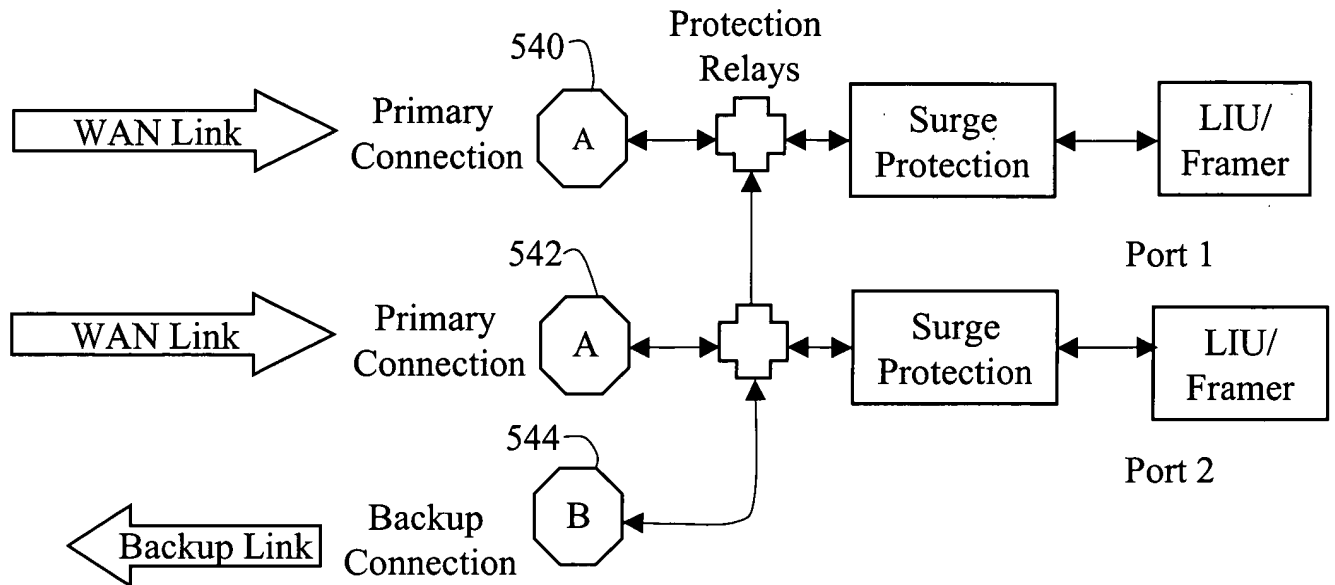


FIG. 25

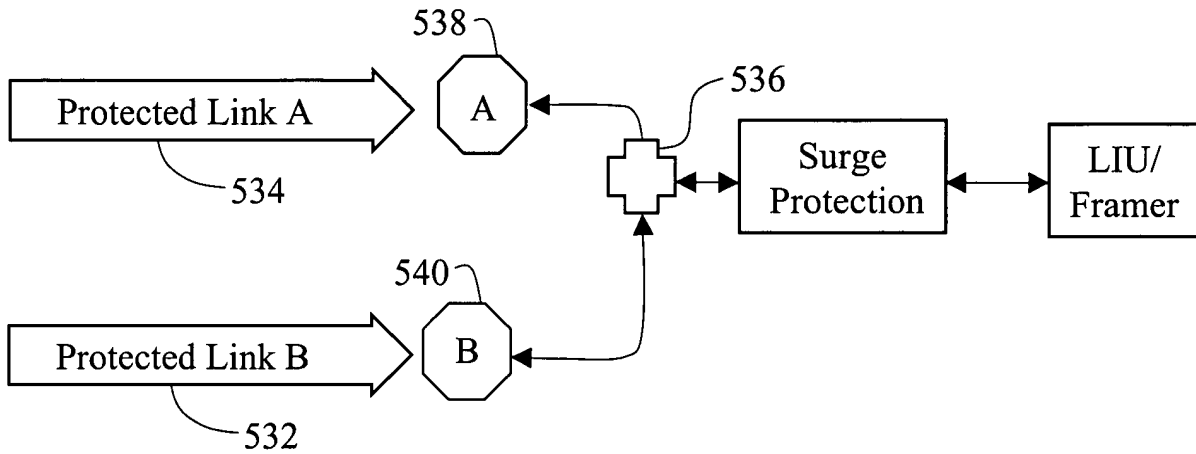


FIG. 26

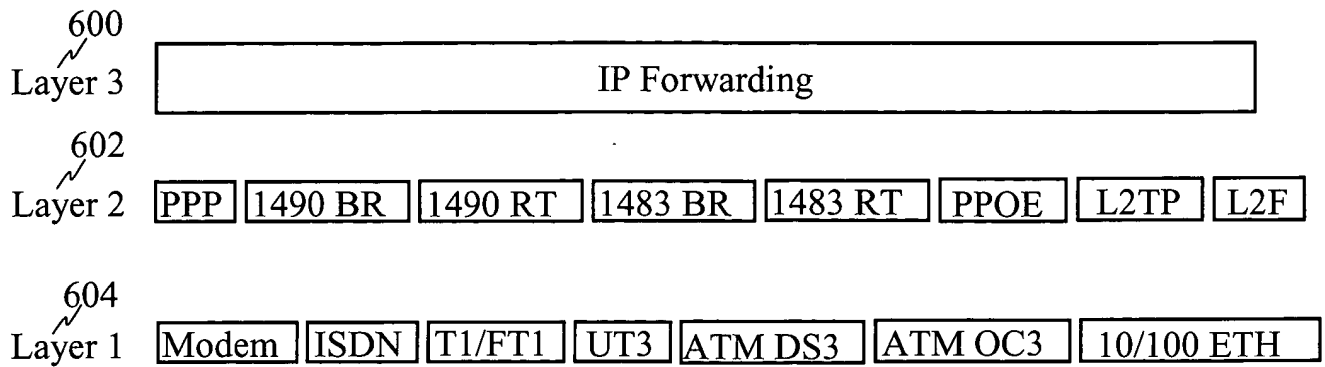


FIG. 27

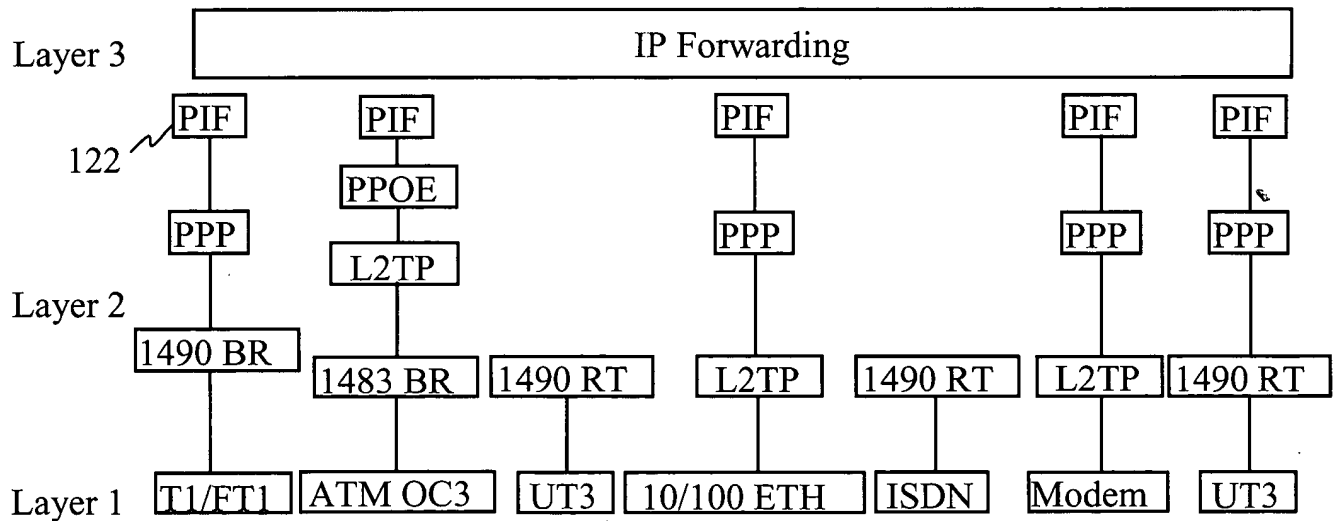


FIG. 28

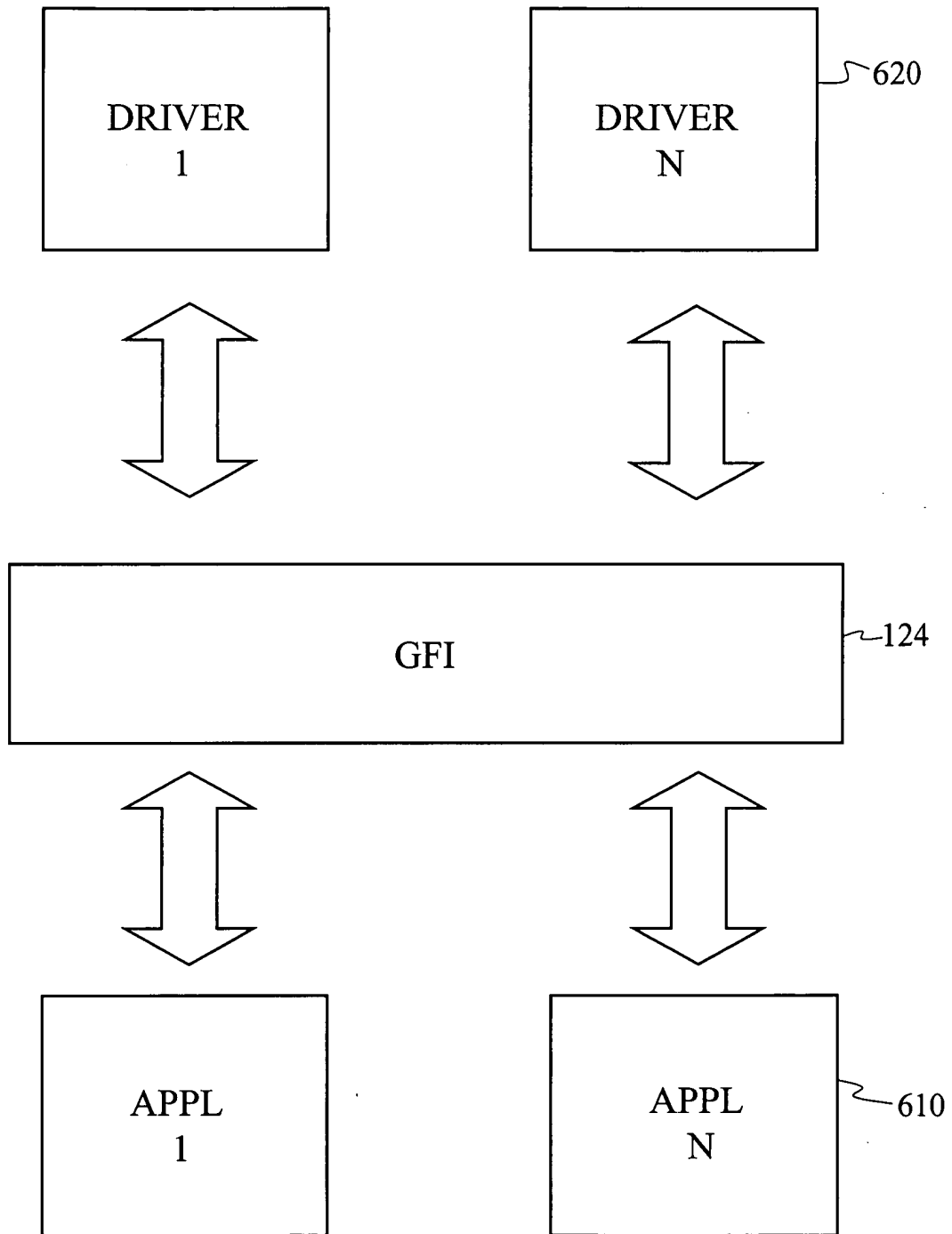


FIG. 29

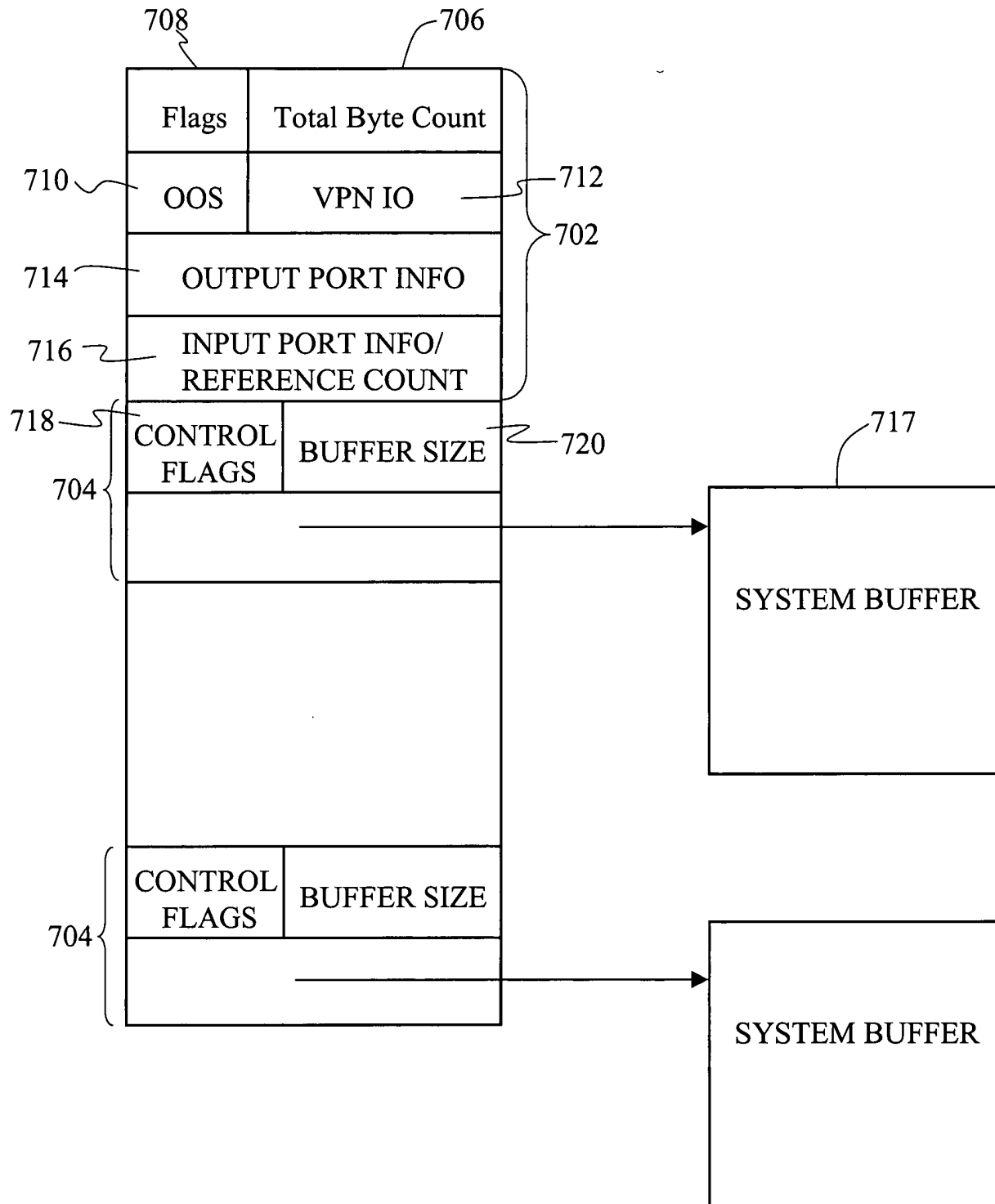


FIG. 30



FPA

| | | | | | |
|--|-------|------|----|------|----------|
| | CHASS | SLOT | PM | CONT | PORT NUM |
|--|-------|------|----|------|----------|

FIG. 31

PPA

| | | | | | |
|--|-------|------|----|------|----------|
| | CHASS | SLOT | PM | LINK | CHAN NUM |
|--|-------|------|----|------|----------|

FIG. 32



INPUT PORT FORMAT

| | | | | | | | | | |
|---------------|--|-------------|--|-------------------|--|-----------|--|---------|--|
| 28 27 | | | | 24 23 22 21 | | 18 17 | | 12 11 | |
| L A N T Y P E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E | | C H A S S | | C A R D | |
| S P A R E E | | S P A R E E | | P O R T T Y P E</ | | | | | |

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FIG. 33



OUTPUT PORT FORMAT

28 27 26 25 24 23 22 21 18 17 12 11

| | | | | | | | | | |
|---------|-------|------------|-----------|-----------|-----------|-------|------|------------|------|
| Release | C R C | Multi Cast | S P A R E | S P A R E | S P A R E | CHASS | CARD | CONTROLLER | PORT |
|---------|-------|------------|-----------|-----------|-----------|-------|------|------------|------|

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FIG. 34



| Port Addr Range | Type | Chass | Card | Control |
|-----------------|---------------------------------------|-----------|----------|---------|
| 0-19 | Well Known Internal Multicast Address | NA | NA | 0 |
| 20-18 | Well Known Internal Unicast Address | NA | Card Num | 0 |
| 40-79 | Well Known External Multicast Address | NA | NA | 0 |
| 80-511 | Dynamic External Multicast Address | NA | NA | 0 |
| 512-2048 | Remote Port Address | Chass Num | Card Num | 0 |

FIG. 35

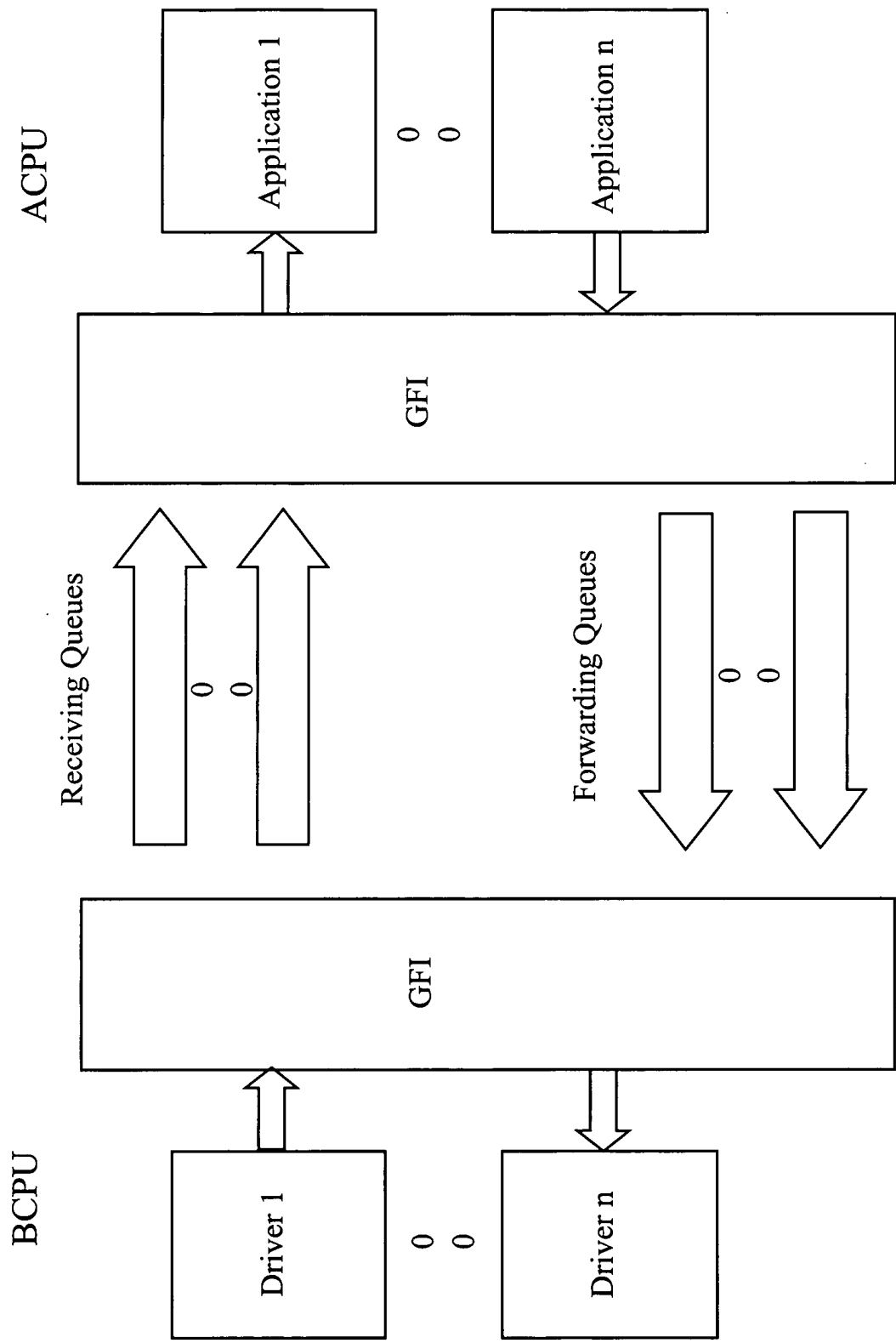


FIG. 36